

# Tulare Lake Regional Forum Summary



## **OVERVIEW OF REGIONAL APPROACH**

Ernie Taylor, Regional Coordinator for the California Department of Water Resources (DWR) South-Central Regional Office, provided a recap of the regional approach. The expanded approach is sponsored by DWR, in conjunction with local entities and organizations, to support regional integrated water management throughout the State. The effort builds on an earlier format used for the Water Plan, which involved regional workshops in each of the DWR hydrologic regions. The **new format** places greater emphasis on webinar and conference call technology, with shorter (about 3 hour duration) and more frequent meetings (occurring a few times a year). Mr. Taylor noted that additional background materials are available online at: [www.waterplan.water.ca.gov/regional/index.cfm](http://www.waterplan.water.ca.gov/regional/index.cfm).

Each Forum is being planned through a "**Design Team**" of local interests and stakeholders, to assure that the most relevant regional topics are addressed through the series of forums. Likely topics for the Forums will focus on water management programs, including Water Plan, IRWM, Statewide Flood Management and others. Other agencies, including local, State, Tribal and Federal programs, are welcome to contribute agenda items for upcoming Forums.

The first Tulare Lake Regional Forum was held on January 17, 2012. Participants had the option of in-person meetings at several satellite locations (Bakersfield, Fresno, Hansford and Visalia) or remote participation via webinar and conference call. Copies of the workshop presentations, handouts, and materials are available on the Water Plan website at [www.waterplan.water.ca.gov/materials](http://www.waterplan.water.ca.gov/materials).

## **DISCUSSION ON WATER PLAN CONTENT FOR REGIONAL REPORTS**

The second presenter, Lew Moeller, Project Manager for Update 2013, provided on the approach for developing the Update 2013 Regional Reports. He noted that the Regional Reports first appeared in Update 2005 with the objective of providing accurate information on regional conditions efforts and priorities related to water management. The content was expanded in Update 2009 to include flood management and water quality. The current work will also expand content, with increased focus on describing unique regional and sub-regional aspects related to water management and planning.

Mr. Moeller then introduced the "story board" for the Regional Reports, where the information will address five major themes:

- The Current State of the Region
- Regional Resource Management Objectives
- Inter-Regional and Statewide Relationships
- Regional Water Management Strategies and Initiatives
- Regional Short- and Long-Term Recommendations

An annotated outline has been prepared, describing the different components associated with each of these themes. The outline was distributed in the room and is also available online at [www.waterplan.water.ca.gov/materials](http://www.waterplan.water.ca.gov/materials) for the date of January 17, 2012.

A collaboration website is also being developed to support access to draft materials, as well as dialog among stakeholders. The website is new and currently under construction. Documents have been uploaded regarding the Tulare Lake Regional Report. The documents can be viewed and accessed by going to <https://dwrregionaloutreach.water.ca.gov/home>. Please note that it is not necessary to log-in to view the documents. In order to post comments or provide

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information, please contact Lew Moeller at [lmoeller@water.ca.gov](mailto:lmoeller@water.ca.gov) or 916-651-5666 to establish a user name and password. On-line registration will be available in the future. Also, a dedicated email address has been established for comments relating to the Tulare Lake Regional Report. Please send your comments or suggestions to: [tlrf@water.ca.gov](mailto:tlrf@water.ca.gov).

### **Discussion**

After hearing the presentation on the approach, content, and structure of the Regional Reports, Forum participants were asked to identify the essential aspects of the “water story” for the Tulare Lake hydrologic region. Discussions occurred in the satellite locations, with a report back from each group. Comments included the following:

#### a. Water quality

- Salinity, pesticides, nitrates, groundwater contamination
- Highlight untreated waste from Tulare County dairies and impacts on water quality
- Irrigated Lands Regulatory Program (State Water Boards)
- See item under water supply on communities relying on contaminated groundwater sources

#### b. Water supply

- Discussions need to make connections between source water and headwaters. (See work of Jeff TenPas, USFS Watershed Improvement Program; Roger Bales, UC Merced and conditions of source waters-parks);
- Add the role of active vegetation management in upper watersheds and fuel reduction; >60% of source water in California comes from National Forest lands (See work of Don Yasuda, USFS and his modeling group)
- Describe the importance of groundwater in Sierra foothills
- Consider regional approaches to conjunctive use, when looking at municipal groundwater levels and recharge; identify where direct use is possible – there are inefficiencies of 30% on the east side when source water is used for recharge rather than direct use.
- Describe use of surface water in Sierras – the inflows and outflows of surface water in the Sierra are often not well understood, and the information does not seem to be presented in any detail.
- Discuss communities that are reliant on contaminated groundwater (AB2222 report by State Water Board and Dept. of Public Health)

#### c. Groundwater (levels, supply)

- Groundwater section should include use of service water,
- Discuss the regulatory reductions (environmental restrictions) that began in 1992 and the impact to agriculture and groundwater
- Describe impacts of agricultural and waterbank pumping on groundwater levels (withdrawals, recharge)
- Describe state of groundwater levels statewide and locally, including subsidence

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### d. Groundwater (quality)

- Nitrate contamination (State Water Board report from SB2x and technical reports from UC Davis will be released in March 2012)

### e. Flood

- Describe flooding on Poso Creek and Deer Creek (west of Shafer/Wasco and north towards Corcoran/Hanford) – agricultural lands were flooded west of Wasco, Delano, Earlimart and Pixley by a breach and failure of the Poso and Deer Creek levee and closing of intake valve (by DFG and US ACE) into Pixley National Wildlife Refuge
  - Water should flow through wildlife refuges into Tulare Lake drainage area instead of being blocked by it
  - Stagnant water and Pixley refuge is causing botulism to waterfowl which is being spread statewide to other waterfowl areas.
  - Repair and/or rebuild the levees to resolve holding flow water within the banks of Poso and Deer Creek and direct flow to the Tulare Lake Basin Drainage Area or new water banks development in the Allensworth, Corcoran, Angiola areas if possible.
  - Question: Who is responsible for managing and maintaining Poso and Deer Creeks and flood waters in those areas?
- Describe flood risks and need for flood protection in upper watersheds.
- Describe conditions of flood infrastructure: “All the levees are primitive. All the water channels are constricted, clogged with debris and vegetation. The irrigation canals are not big enough to handle floodwaters.” (Attributed as professional opinion of Tulare County Flood Control District Engineer) – no retention basins for recharge or flood waters in unincorporated Tulare County

### f. Disadvantaged Communities (DACs)

- Describe the capacity of DACs to obtain grant funding
- Describe DAC issues at a regional scale
- Include DAC water and wastewater providers (and challenges), recognizing them as water management agencies (DAC pilot study in Tulare Lake can provide information)
- Describe DAC pilot studies and planning efforts – to share information

### g. Climate Change

- Long-term (1000+ years) record of flood and drought in Tulare Lake (and the State) – this is important since variations on the long-term record exceed variations seen in the past 100 years (see 2000 year history of the Sequoia and Kings National Park by John T. Austin, to be released soon)

### h. Developing Regional Reports:

- Have an open editing process
- Pull information from IRWM studies
- Pull information from ag water management plans, due to be released at the end of 2012

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- Provide some case studies to highlight management responses that are adapting to reduced surface water supplies in the Tulare Lake region; e.g. success stories on improved water use efficiency and conjunctive use.
- Create more of a plan, drawing on existing local planning, scenarios and caucuses
- i. Regarding data collection and sharing:
  - Clarify state approach on data confidentiality; e.g. IWRIS and GeoTracker GAMA have inconsistent approaches to confidentiality – IWRIS should be merged with GeoTracker GAMA
  - Local meetings and tools are needed to collect and integrate data regionally (Fresno State's Ca. Water Institute can provide information.)
- j. Regarding outreach:
  - Get a local news story on Forums to get people and partners involved and share information on problems and objectives
  - Contact the LAFCOs and provide information on the Water Plan.

### **OVERVIEW OF GROUNDWATER AND SUSTAINABILITY INDICATORS CAUCUSES**

Abdul Khan, DWR, is the lead for two key enhancements in Update 2013: the Groundwater Caucus and the Sustainability Indicators Caucus. He provide a brief description of these two efforts:

- The objective for the Groundwater content enhancement is to improve the information available on statewide and regional groundwater conditions. This is intended to better support groundwater management decisions and policies. The effort is based on existing laws and policies, as well as best available data and analyses. Mr. Khan outlined the scope of work, schedule and key milestones – and also noted what types of potential groundwater data activities are not within the scope of the current effort.
- The Sustainability Indicators Framework seeks to track Water Plan objectives and Resource Management Strategies in promoting sustainable water uses and reliable water supplies in regions and across the State. This will be assess by developing an analysis framework, including creating and evaluating a water footprint model. The approach consists of identifying sustainability indicator objectives and targets for future conditions, then conducting a pilot study to evaluate outcomes.

### **UPDATE ON GROUNDWATER MANAGEMENT SURVEY AND ACWA GROUNDWATER FRAMEWORK**

Danielle Blacet, Senior Regulatory Advocate, Association of California Water Agencies (ACWA), described two elements of recent activity by ACWA regarding groundwater management:

- The Update 2013 Groundwater Caucus is partnering with ACWA to conduct a **survey on groundwater management and activities**. The survey was developed as a result of what was originally two independent plans for surveys on groundwater management: one by ACWA and another by DWR. To leverage the survey outreach effort, DWR has teamed with ACWA, and the ACWA survey was expanded to incorporate the DWR

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survey elements. The survey is open to all water resource organizations across the State and covers all types of groundwater systems, including fractured-rock.

- The survey is aimed at compiling information on groundwater management efforts statewide to share with policy makers and other stakeholders.
- The survey information will help describe statewide groundwater management activities in the California Water Plan Update 2013.
- The survey will help inform and guide ACWA's efforts to facilitate effective groundwater management in California.
- The information will also help identify areas where local groundwater management needs to be expanded and where local agencies may need assistance to develop and implement sustainable groundwater management activities.
- The details gathered through the survey on groundwater banking projects in California will provide important information for those who want to learn more about this valuable water management tool.

Ms. Blacet noted that, other than contact information, it is not mandatory to provide responses to every question. Since information from the survey will be used in maps and other materials that will be available to the public, survey responders may want to consider whether specific responses are proprietary for their organization. Forum participants were requested to complete the survey and to pass the link along to others who might be interested.

- ACWA is working on implementing its Groundwater Framework which encourages local approaches to groundwater management. Key activities for the next year include outreach to small and disadvantaged communities, greater emphasis on sustainability and transparency, recognition of groundwater recharge as a beneficial use and implementation of SB 981 (groundwater recharge). Other priorities include enhanced data and data access, and partnering with the California Water Foundation on technical workshops. Ms. Blacet noted that efforts relating to small and disadvantaged communities will focus on water quality and increased funding for infrastructure.

Danielle concluded the presentation by highlighting the areas of integration between ACWA's activities and DWR's IRWM program. This includes ACWA's commitment to advocacy and information-sharing on water issues, as well promoting local and regional approaches to water management and planning, and collaborating with DWR on the California State Groundwater Elevation Monitoring workshops and the Groundwater Management survey.

### ***IRWM PLANNING***

#### **Statewide IRWM Program**

Charlie Kratzer is with the DWR Division of Integrated Regional Water Management (IRWM) and, more specifically, in the Regional Planning Branch which complements the Financial Assistance Branch. Mr. Kratzer began his presentation by noting that IRWM is a key initiative in Updates 2005 and 2009 of the California Water Plan. He emphasized the collaborative and comprehensive approaches that characterize IRWM in managing water resources and referred to the definition provided on the IRWM website. The homepage provides links to IRWM news items and lists contact information for program assistance.

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A brief recap of program activities was provided, including anticipated dates for future IRWM grant solicitations. A map illustrated the current IRWM regions that have been accepted to date, totaling 48 in all. These regions cover almost 90% of California and 99% of its population. The IRWMs in the Tulare Lake region were shown, along with the primary contacts for each group. Mr. Kratzer then provided some highlights from the 2011 IRWM conference, reporting on local presenters at the conference and describing feedback that was received regarding the IRWM program.

A new effort for the Regional Planning Branch is the strategic planning process that is now underway. Key milestones in the process will include the scoping and planning draft *“Project Definition Report”* which is expected to be released in March 2012. Public workshops will be conducted to review and finalize the report and inform development of the Strategic Plan for IRWM, targeted for release in December 2012. Implementation efforts will be outlined and assessed through formal implementation plans and evaluation reports.

### **Climate Change Handbook**

Michelle Selmon, DWR, provided an overview of the Climate Change program. She explained that the program is staffed by an inter-disciplinary team representing headquarters and the regional offices. Their responsibilities include developing guidance for addressing climate change and greenhouse gases, as well as conducting outreach and providing technical assistance. Ms. Selmon introduced the recently published *“Climate Change Handbook for Regional Water Planning.”*

The handbook is designed to support IRWM activities by outlining approaches to factor climate change into water planning and by summarizing available information in a way that is useful for regional water planning. On the DWR Climate Change webpage, the handbook is described as providing “key decision considerations, resources, tools, and decision options that will guide resource managers and planners as they develop their own solutions for how to adapt their programs to a changing climate.” It was emphasized that the handbook does not represent a new set of requirements or an extension of IRWM guidelines. The document can be downloaded from the Climate Change website at [www.water.ca.gov/climatechange](http://www.water.ca.gov/climatechange).

### **Local IRWM Plans (IRWMPs)**

Four local IRWM efforts presented information on their programs, including information on their constituent members and key elements of the IRWM Plans. The IRWM efforts included Upper Kings Basin, Kern County, Poso Creek and Southern Sierra. A brief summary of each presentation is provided below:

- Upper Kings Basin: Information was presented by Eric Osterling and included a description of IRWM boundaries, organizational timeline, governance structure and planning partners. He noted the cumulative declines in groundwater storage, since 1963, which is a primary driver for the IRWMP priorities. Key accomplishments include: increases in direct recharge, reductions in consumption, greater outreach to disadvantaged communities and developing groundwater management and monitoring plans. Mr. Osterling also described planning challenges associated with maintaining grant eligibility, balancing equal participation within the governance structure and finding collaborative solutions that address the needs of a large and diverse group of stakeholders.



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- Kern County: The presentation was made by Lauren Bauer and began with a map of IRWM boundaries and an organizational timeline. Over the past six years, both outreach and staff turnover have presented challenges to the effort. Key lessons learned have reinforced the need for flexibility, dedicated outreach and recognition of progress that has been made.  
Ms. Bauer also noted that with a diverse group, there will be times when proposals do not meet the interests of all – it is essential to adopt a regional perspective and look for broad approaches. She emphasized the importance of financial commitment to support IRWM planning processes which are time intensive. Future challenges will include maintaining momentum, funding constraints and uncertainties in the State IRWM program itself.
- Poso Creek: Paul Oshel provided an overview and started by identifying the members of the IRWM management group, which includes 7 district and 16 disadvantaged communities. The map showing the IRWM boundaries also identified water sources and major hydrologic and conveyance features. Mr. Oshel summarized the IRWM chronology and described the projected declines in groundwater levels which create resulting challenges for supply, reliability and water quality. In looking to offset anticipated reductions in surface water supplies, IRWM plan priorities emphasize non-structural and structural support for water transfers, exchanges and conjunctive use – specific projects were illustrated on a supply system map and accompanied by a listing of project costs.
- Southern Sierra: Bobby Kamansky reported that the original 3-member group had expanded into an inclusive 18-member committee working with adjacent cooperating entities. Regional priorities include: water supplies for disadvantaged communities, increasing water resource capacity (including meadow restoration), disaster planning, water quality and land use considerations. Important start-up successes include creating an information database for eight watersheds and using a public process to identify issues, goals, objectives and projects. Key challenges involve: working in a large and remote region that is severely disadvantaged in terms of funding, data and capacity; and an unsuccessful grant application which highlights the need for diverse funding sources.

### **Participation** (at satellite locations)

Denis Akins, Souty of Tulare  
Julie Allen, Southern Sierra IRWM  
Douglas Anthony, EnerNoc  
Lauren Bauer, Kern County Water Agency and Kern County IRWM  
Brock Buche, City of Fresno  
Pam Buford, Central Valley Regional Water Boards  
Sarah Campe, Tulare Basin Wildlife Partners  
Carole Clum, Three Rivers  
Pete Clum, Three Rivers  
Carole Combs, Tulare Basin Wildlife Partners  
David Cone, Kings River Conservation District  
Mary Lou Cotton, Kennedy/Jenks  
Juliet de Campos, Community Water Center  
Laurel Firestone, Community Water Center  
Michael Hickey, Tulare Resource Management Agency, GIS  
Brian Hockett, NorthWest Kern RCD  
Carolyn Hunsaker, USFS Research

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Bobby Kamansky, Southern Sierra IRWMP  
Karl Longley, California Water Institute, UC Fresno  
Don Mills, Kings County Water District  
Paul Oshel, Semitropic Water Storage District, Poso Creek IRWM  
Eric Osterling, Kings River Conservation District  
Joe Prado, County of Fresno  
Martin Querin, City of Fresno  
Bud Rice, City of Taft  
Ron Sprague, California County Planning Commissioners Association  
Clinton Stewart, Bear Valley Community Services District  
Linh Tran, EnerNoc  
Jim Verboon, Kings Water Commission  
Lois Watson, League of Women Voters of Kern County  
Jacob Westra, Tulare Lake Basin Water Storage District  
Kathy Wood, Tulare Basin Watershed Coordinator  
Nikki Woodard, Tulare Basin Wildlife Partners

### Staff and Support

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Lewis Moeller, DWR, Project Manager, Update 2013  
Chris Montoya, DWR, South-Central Regional Office  
David Purkey, Stockholm Environment Institute  
Michelle Selmon, DWR, South-Central Regional Office, Climate Change Team  
Ernie Taylor, DWR, Regional Coordinator, South-Central Regional Office  
Judie Talbot, CCP-CSUS, Facilitator

### Via webinar:

Amando Garza, Carollo  
Catherine Gill, Water Boards  
Johannah Hartley, County of Kings  
Augustine Ramirez, Fresno County Dept. of Public Works and Planning  
Jose Alarcon, DWR, Lead, Water Quality  
Abdul Khan, DWR, Lead, Groundwater Caucus  
John Kirk, DWR, South-Central Regional Office